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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/782,064
Filing Date: February 14, 2001
Appellant(s): MOTOYAMA ET AL.

James J. Kulbaski & Kurt M. Berger
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 04-26-2007 appealing from the Office action mailed 01-03-2007.

1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

| | | |
|---------------|--------------------|------------------|
| US005414494A | Aikens et al. | filed 12-06-1993 |
| US005956487A | Venkatraman et al. | filed 10-25-1996 |
| US005727135A | Webb et al. | filed 08-02-1996 |
| US006745224B1 | D'Souza et al. | filed 12-06-1996 |

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(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1- 4, 9-12 and 17-20 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable by Aikens et al. US005414494A – issued 05-09-1995 (hereinafter Aikens), in view of Venkatraman et al. US005956487A – issued 09-21-1999 (hereinafter Venkatraman), further in view of Webb et al US005727135A – issued 03-10-1998 (hereinafter Webb).

Regarding independent claim 1, Aiken teaches receiving from a first one of the plurality of target applications through an interface by a monitoring device in the appliance or device, a request to send first information monitored usage of the first one of the plurality of target applications to a first predetermined destination. Specifically Aiken discloses a printer device with operation monitoring (collection) capabilities (Aikens Abstract), whereby said printer comprises control boards (target applications) providing control for predetermined systems of said printer (Aikens Figure 2 items 102, 104, and 106). Since Aikens

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teaches that any one of the control boards can be the master control for the other boards, Aiken Figure 2 item 108 (with modem item 120), can be designated as the master controller, and therefore reasonably interpreted as a **first predetermined destination** of Applicant invention. In order for item 36 and 52 of Aikens (Aikens internal user interface - see Aikens Figure 2) to monitor accordingly, communication (i.e. a "first request" for "first" information) commences between said interface, the master control, and the various control board applications (one or more boards) utilizing communication channel 98, said information comprising monitoring (i.e. usage) information;

Aikens does not explicitly teach, but Venkatraman teaches the **first communication protocol using a first data format**. For example Venkatraman discloses the embedding Web access in an appliance (i.e. a printer) for user interface functions (Venkatraman Abstract). With reference to Venkatraman Figure 1a, Venkatraman discloses monitoring of a printer device via printer device (item 10), an embedded monitor for monitoring accordingly (item 16), an embedded web server (item 14), and an embedded web page dynamically created to provide monitored information and user interface functions (Venkatraman col. 3 lines 5-42).

It is noted that all of the above items reside within printer device item 10. Venkatraman also discloses HTTP as a protocol, and HTML as a language (format) (Venkatraman col. 2 lines 42-48).

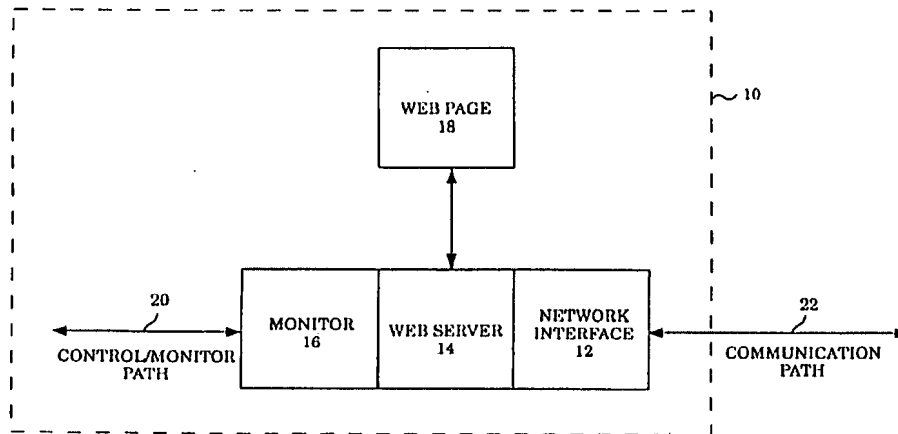


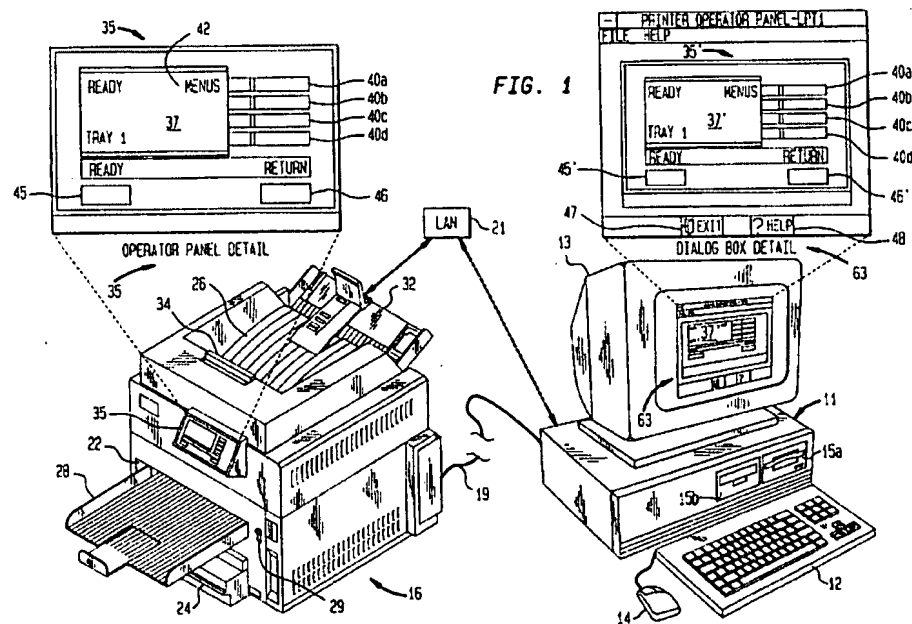
Figure 1a

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Venkatraman's HTTP and HTML protocol and format to Aiken's internal communication, providing the user interface of Aikens the benefit of Web page presentation (i.e. URLs, etc.) for a visually enhanced user interface, and for providing monitoring utilizing Aikens's modem interface connected to the Internet.

Aikens does not explicitly teach, but Webb teaches **receiving from a second one of the plurality of target applications through the interface, by the monitoring device, a request to send second information regarding monitored usage of the second one of the plurality of target applications to a second predetermined destination through a second communication protocol using a second data format, wherein the first communication protocol is different from the second communication protocol**. Specifically Webb discloses the remote printer status information indication that is used for monitoring printer status (Webb Abstract). With reference to Figure 1, Webb discloses a computer (reasonably interpreted as a second destination) connected to a printer device via cable (item 19). Although Webb discloses said item

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as a parallel interface, Web also discloses this interface can be serial based as well (see Webb column 11 lines 1-5, column 10 lines 1-3). Webb discloses bi-directional communication of monitoring information via the Network Printer Alliance Protocol (NPAP), which is a protocol specific to printer communication. Webb also discloses that NPAP is a "format" (see Webb column 7 lines 40-53, and column 8 lines 20-25, Fig. 1). It is also noted that the NPAP protocol/format is different from the HTTP/HTML protocol/format.



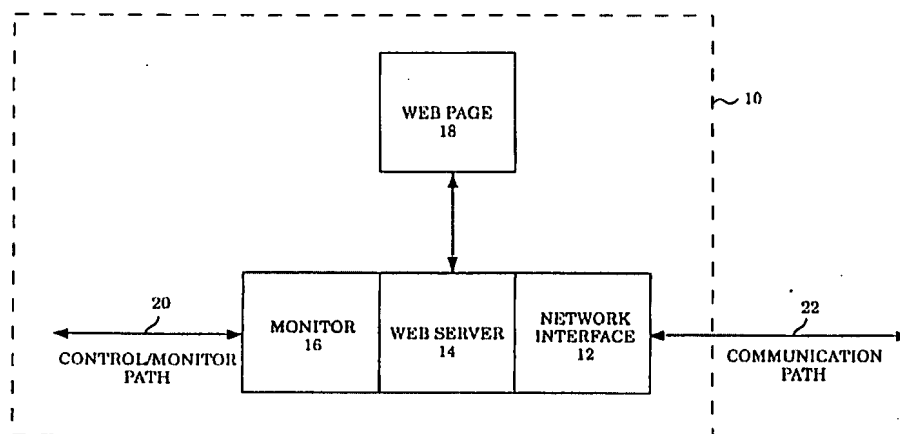
It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Webb to Aikens (using Aikens's serial port - see Aikens column 6 line 7), providing Aikens the benefit of bi-directional control to Aikens's status (usage) monitoring, facilitating accurate visual monitoring.

Regarding **independent claim 9**, the rejection of claim 1 is fully incorporated.

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Regarding **independent claim 17**, the rejection of claim 1 is fully incorporated. In addition, a program product comprising a computer readable medium embodying program instructions for causing an object-oriented system to perform the method of claim 1 (Aikens col. 6, lines 2 lines 15-25).

Regarding **claim 2**, Aikens and Webb do not explicitly teach, but Venkatraman teaches **wherein the first data format includes one of text format, binary format, comma separated format and XML format and the first communication protocol includes one of, Simple Mail Transfer Protocol (SMTP), File Transfer Protocol and local disk**. For example Venkatraman teaches HTTP as a protocol, and HTML as a language (format) (Venkatraman column 2 lines 42-48). See also Aiken Fig. 2 item 118 "mem"- reasonably interpreted as a disk, since a disk is a well-known form of memory, in this case the "mem" Fig. 2 item 118 resides within the unit (i.e. local). See also (Venkatraman at col. 3, lines 60-65) teaches the communication path item 22 represents any communication means that is capable of transferring HTML (format) files according to the HTTP web protocol (i.e. FTP) (see Venkatraman at col. 3, lines 60-65).

**Figure 1a**

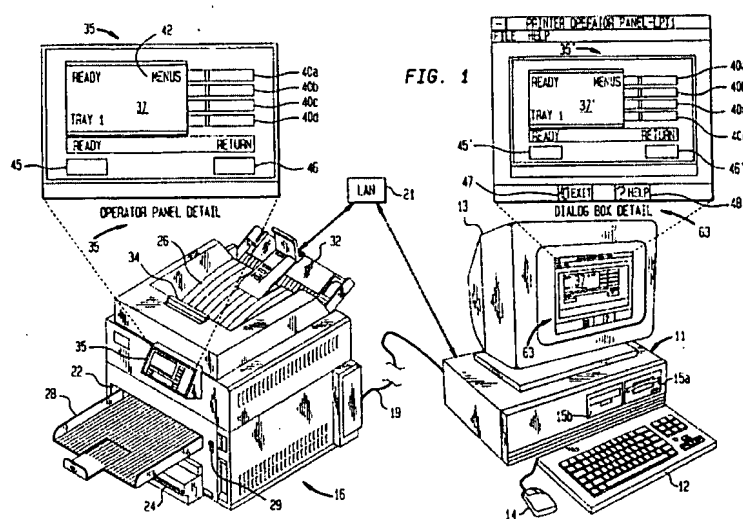
It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Venkatraman's HTTP and HTML protocol and format to Aiken's internal communication, providing the user interface of Aikens the benefit of Web page presentation (i.e. URLs, etc.) for a visually enhanced user interface, and for providing monitoring utilizing Aikens's modem interface connected to the Internet.

Regarding **claim 3**, Aikens does not explicitly teach, but Venkatraman in combination with Webb teach **wherein the first data format is different from the second data format**. For example Venkatraman discloses the embedding Web access in an appliance (i.e. a printer) for user interface functions (Venkatraman Abstract). With reference to Venkatraman Figure 1a, Venkatraman discloses monitoring of a printer device via printer device (item 10), an embedded monitor for monitoring accordingly (item 16), an embedded web server (item 14), and an embedded web page dynamically created to provide monitored information and user interface functions (Venkatraman col. 3 lines 5-42).

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It is noted that all of the above items reside within printer device item 10. Venkatraman also discloses HTTP as a protocol, and HTML as a language (format) (Venkatraman col. 2 lines 42-48).

In addition, Webb discloses that NPAP is a "format" (see Webb column 7 lines 40-53, and column 8 lines 20-25). It is also noted that the NPAP protocol/format is different from the HTTP/HTML protocol/format.



It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of Aikens (using Aikens's serial port - see Aikens column 6 line 7), providing Aikens the benefit of bi-directional control to Aikens's status (usage) monitoring, facilitating accurate visual monitoring, to include the teaching of Venkatraman's HTTP and HTML protocol and format to Aiken's internal communication, providing the user interface of Aikens the benefit of Web page presentation (i.e. URLs, etc.) for a visually enhanced user interface, and for providing monitoring utilizing Aikens's modem interface connected to the Internet, and the remote printer status information indication that is used for monitoring printer

status and also includes Webb's Protocol (NPAP), which is a protocol specific to printer communication. Webb also discloses that NPAP is a "format" wherein the NPAP protocol/format is different from the HTTP/HTML protocol/format (see Webb column 7 lines 40-53, and column 8 lines 20-25).

Regarding **claim 4**, the rejection of claim 1 is fully incorporated. In addition, Aikens teaches **sending the first format data to the first predetermined destination first communication protocol**. Specifically Aiken teaches a printer device with operation monitoring (collection) capabilities (Aikens Abstract), whereby said printer comprises control boards (target applications) providing control for predetermined systems of said printer (Aikens Figure 2 items 102, 104, 106). Since Aikens teaches that any one of the control boards can be the master control for the other boards, Aiken Figure 2 item 108 (with modem item 120), can be designated as the master controller, and therefore reasonably interpreted as **a first predetermined destination**. In order for item 36 and 52 of Aikens (Aikens internal user interface - see Aikens Figure 2) to monitor accordingly, communication (i.e. a "first request" for "first" information), and therefore reasonably interpreted as a **first communication protocol** commences between said interface, the master control, and the various control board applications (one or more boards) utilizing communication channel 98, said information comprising monitoring (i.e. usage) information.

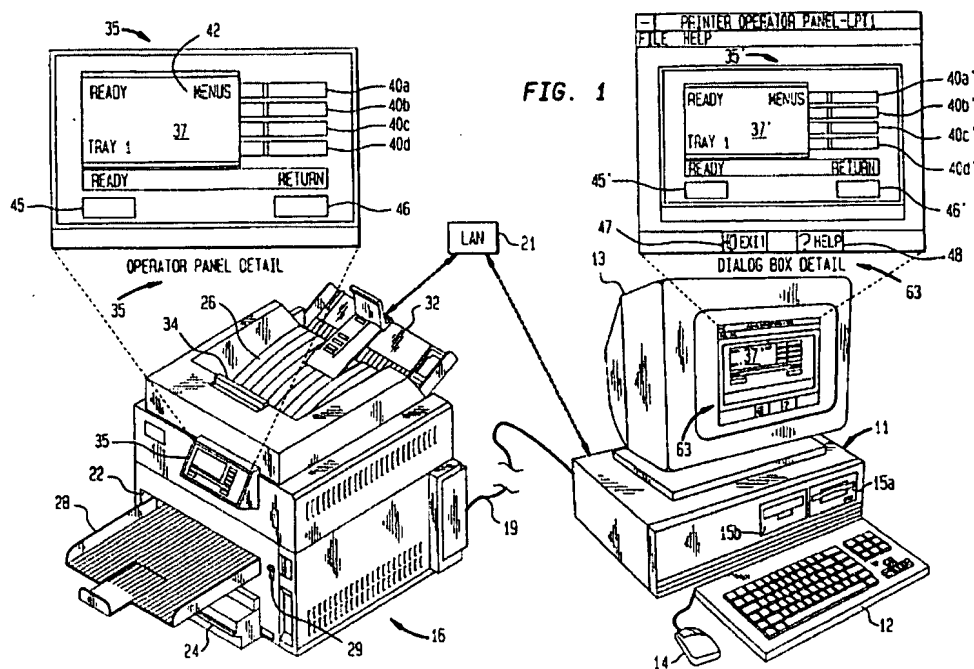
Aikens does not explicitly teach, but Venkatraman teaches **formatting the first information into the first format data according to the first data format, formatting the second information into second formatted data according to the second data format**. For

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example Venkatraman teaches formatting into HTML (see Venkatraman at col. 4, lines 50-55), and Webb teaches translation into NPAP compliant format (see Webb at col. 7, lines 40-50 and at col. 8, lines 20-25).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Venkatraman's HTTP and HTML protocol, formatting and Webb's teaching of translation into NPAP compliant format to Aiken's internal communication, providing the user interface of Aikens the benefit of Web page presentation (i.e. URLs, etc.) for a visually enhanced user interface, and for providing monitoring utilizing Aikens's modem interface connected to the Internet.

Aikens and Venkatraman do not explicitly teach, but Webb teaches **sending the second predetermined destination through a second communication protocol using a second data format, wherein the first communication protocol is different from the second communication protocol**. Specifically Webb teaches remote printer status information indication for monitoring printer status (Webb Abstract). With reference to Figure 1, Webb teaches a computer (reasonably interpreted as a second destination) connected to a printer device via cable (item 19). Although Webb teaches said item as a parallel interface, Web also teaches this interface can be serial based as well (see Webb column 1 I lines 1-5, column 10 lines 1-3). Webb teaches bi-directional communication of monitoring information via the Network Printer Alliance Protocol (NPAP) which is a protocol specific to printer communication. Webb also teaches that NPAP is a "format" (see Webb column 7 lines 40-53, and column 8 lines 20-25). It is also noted that the NPAP protocol/format is different from the HTTP/HTML protocol/format.



It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Webb to Aikens (using Aikens' serial port - see Aikens column 6 line 7) and using Venkatraman's teaching of the HTTP web protocol that capable of transferring HTML format (see Venkatraman at col. 3, lines 60-65), providing Aikens the benefit of bi-directional control to Aikens' status (usage) monitoring, facilitating accurate visual monitoring.

Regarding **claims 10-12**, the rejection of claims 2-4 are fully incorporated. In addition, a system embodied therein for performance the method of claims 2-4 (Aikens col. 6, lines 2 lines 15-25).

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Regarding **claim 18**, the rejection of claim 2 is fully incorporated. In addition, a program product embodied therein for performance the method of claim 2 (Aikens col. 6, lines 2 lines 15-25).

Regarding claim 19, the rejection of claim 3 is fully incorporated. In addition, a program product embodied therein for performance the method of claim 2 (Aikens col. 6, lines 2 lines 15-25).

Regarding **claim 20**, the rejection of claim 4 is fully incorporated. In addition, a program product embodied therein for performance the method of claim 4 (Aikens col. 6, lines 2 lines 15-25).

Regarding **claim 25**, the rejection of claim 5 is fully incorporated. In addition, Aikens teaches **wherein the first predetermine destination is a component internal to the appliance or device**. Specifically Aikens teaches in Fig. 2, item 108 “mem”, which is “internal” to the printer.

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Claims 5-8, 13-16 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable by Aikens et al. US005414494A – issued 05/09/1995 (hereinafter Aikens), in view of Venkatraman et al. US005956487A – issued 09/21/1999 (hereinafter Venkatraman), further in view of Webb et al US005727135A – issued 00/10/1998 (hereinafter Webb), further in view of D’Souza et al. US006745224B1– filed 12/06/1996 (hereinafter D’Souza).

Regarding **claim 5**, Aikens does not explicitly teach, but Venkatraman teaches the **step of formatting the first information includes creating a first software class, and creating a first formatted information software object**. For example Venkatraman discloses HTTP as a protocol, and HTML as a language (format) (Venkatraman col. 2 lines 42-48). The Examiner reads the claimed **a first software class** as equivalent to Venkatraman’s HTML as a language (format), and the claimed **a first software class** as equivalent to Venkatraman’s HTML as a language (format). Furthermore, Venkatraman disclosing the HTTP protocols that enable various control functions for the device 10 to be initiated from a web client via the communication path 22. The web page 18 may contain text, images, multimedia files, forms, tables or any object type supported by the HTTP and HTML protocols (Venkatraman col. 3 lines 30-45).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Venkatraman's HTTP and HTML protocol, formatting and Webb’s teaching of translation into NPAP compliant format to Aiken's internal communication, providing the user interface of Aikens the benefit of Web page presentation (i.e. URLs, etc.) for a visually enhanced user interface, and for providing monitoring utilizing Aikens' modem interface connected to the Internet.

Aikens, Venkatraman, and Webb do not explicitly teach, but D'Souza teaches **having a declared virtual function**. Specifically D'Souza discloses Microsoft Corporation's COM specification defines binary standards for objects and their interfaces whereby a typical object is represented in the system by an instance data structure, a virtual function table, and member functions (D'Souza col. 15, lines 30-40).

In addition, Aikens, Venkatraman, and Webb do not explicitly teach, but D'Souza teaches **creating a second software class derived from the first software class having a first definition of the declared virtual function**. Specifically D'Souza disclosing the client programs interact with the object by calling the member functions on a particular interface of the object. The object also exhibits polymorphism and inheritance in that the object which can provide interfaces in common with a base class and other similar objects, so that client programs can interact with each of the objects in the same manner by calling member functions of the interface that the objects have in common (D'Souza col. 16, lines 1-15).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply D'Souza's Object Oriented Programming (OOP) compiles language C++, providing the class inherent and virtual function that benefit Venkatraman's HTTP and HTML protocol and format to Aiken's internal communication, providing the user interface of Aikens the benefit of Web page presentation (i.e. URLs, etc.) for a visually enhanced user interface, and for providing monitoring utilizing Aikens' modem interface connected to the Internet.

Regarding **claim 6**, Aikens, Venkatraman, and D'Souza do not explicitly teach, but Webb teaches **formatting first formatted information according to one of comma separated format and XML format**. Specifically Webb teaches bi-directional communication of monitoring information via the Network Printer Alliance Protocol (NPAP) which is a protocol specific to printer communication. Webb also teaches that NPAP is a "format" (see Webb column 7 lines 40-53, and column 8 lines 20-25). It is also noted that the NPAP protocol/format is different from the HTTP/HTML protocol/format. Further more Webb also teaches that NPAP protocol/format is formatting using; bytes ordering (comma separated format) (Webb at col. 1260 through col. 13, line 25).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Venkatraman's HTTP and HTML protocol and format using bytes ordering (comma separated format) to D'Souza's Object Oriented Programming (OOP) compiles language C++, providing the class inherent and Aiken's internal communication, providing the user interface of Aikens the benefit of Web page presentation (i.e. URLs, etc.) for a visually enhanced user interface, and for providing monitoring utilizing Aikens' modem interface connected to the Internet.

Regarding **claim 7**, the rejection of claim 5 is fully incorporated. In addition, Aikens, Venkatraman, and Webb do not explicitly teach, but D'Souza teaches **the third software class, derives from the first software class, having a second definition of the declare virtual function**. Specifically D'Souza disclosing the client programs interact with the object by calling the member functions on a particular interface of the object. The object also exhibits polymorphism and inheritance in that the object which can provide interfaces in common with a base class and other similar objects, so that client programs can interact with each of the objects in the same

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manner by calling member functions of the interface that the objects have in common (D'Souza col. 16, lines 1-15).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply D'Souza's Object Oriented Programming (OOP) compiles language C++, providing the class inherent and virtual function that benefit Venkatraman's HTTP and HTML_ protocol and format to Aiken's internal communication, providing the user interface of Aikens the benefit of Web page presentation (i.e. URLs, etc.) for a visually enhanced user interface, and for providing monitoring utilizing Aikens' modem interface connected to the Internet.

Regarding **claim 8**, Aiken, and D'Souza do not explicitly teach, but Venkatraman teaches **creating a first formatted data software object, comprises: formatting first formatted data according to one of binary format and text format**. For example Venkatraman discloses formatting into HTML (see Venkatraman at col. 4, lines 50-55), and Webb teaches translation into NPAP compliant format (see Webb at col. 7, lines 40-50 and at col. 8, lines 20-25).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Venkatraman's HTTP and HTML protocol, formatting and Webb's teaching of translation into NPAP compliant format to Aikens' internal communication, providing the user interface of Aikens the benefit of Web page presentation (i.e. URLs, etc.) for a visually enhanced user interface, and for providing monitoring utilizing Aikens' modem interface connected to the Internet.

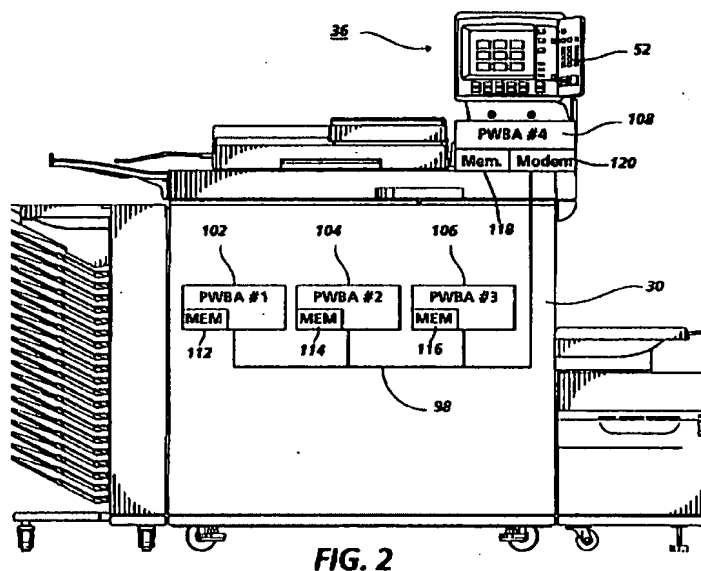
Regarding **claims 13-16**, the rejections of claims 5-8 are fully incorporated.

Regarding **claims 21-24**, the rejections of claims 5-8 are fully incorporated.

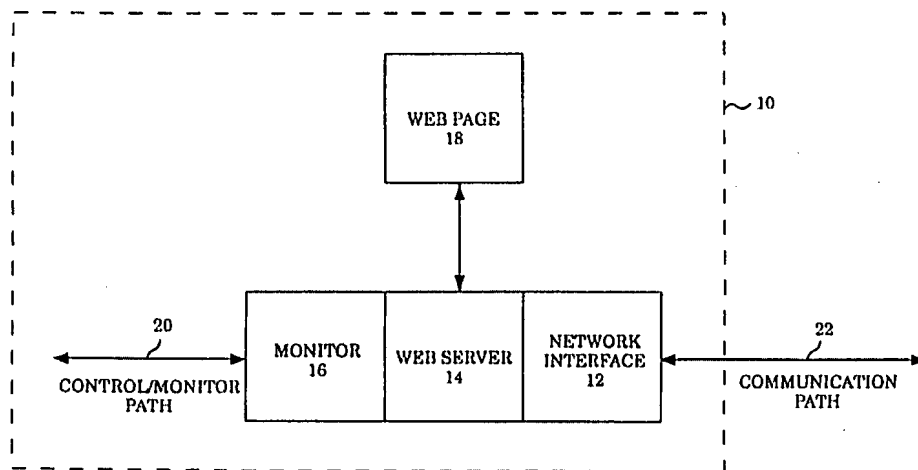
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(10) Response to ArgumentBrief description of cited prior arts:

Aikens discloses a printer device with operation monitoring (collection) capabilities (Aikens Abstract), whereby said printer comprises control boards (target applications) providing control for predetermined systems of said printer (Aikens Fig. 2 items 102, 104, and 106).

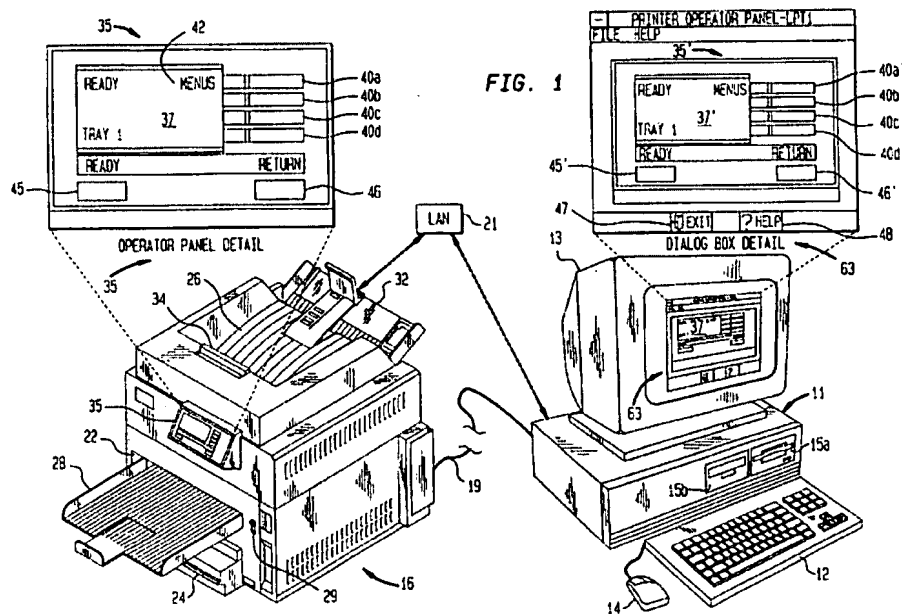


Venkatraman discloses the embedding Web access in an appliance (home page for device, i.e. a printer see Fig. 3) for user interface functions (Venkatraman Abstract), an embedded monitor for monitoring accordingly (item 16), an embedded web server (item 14), and an embedded web page dynamically created to provide monitored information and user interface functions via communication path (item 22) (Venkatraman col. 3 lines 5-42, Fig. 1a).

**Figure 1a**

Webb discloses the remote printer status information indication that is used for monitoring printer status (Webb Abstract). With reference to Figure 1, Webb discloses a computer (reasonably interpreted as a second destination) connected to a printer device via cable (item 19). Although Webb discloses said item as a parallel interface, Web also discloses this interface can be serial based as well (see Webb column 11 lines 1-5, column 10 lines 1-3). Webb discloses bi-directional communication of monitoring information via the Network Printer Alliance Protocol (NPAP), which is a protocol specific to printer communication. Webb also discloses that NPAP is a "format" (see Webb column 7 lines 40-53, and column 8 lines 20-25, Fig. 1). It is also noted that the NPAP protocol/format is different from the HTTP/HTML protocol/format.

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D'Souza discloses a virtual function table, and member functions of an object oriented framework that provides Microsoft Corporation's COM specification defines binary standards for objects and their interfaces whereby a typical object is represented in the system by an instance data structure, a virtual function table, and member functions (D'Souza col. 15, lines 30-40). In addition, disclosing the client programs interact with the object by calling the member functions on a particular interface of the object. The object also exhibits polymorphism and inheritance in that the object which can provide interfaces in common with a base class and other similar objects, so that client programs can interact with each of the objects in the same manner by calling member functions of the interface that the objects have in common (D'Souza col. 16, lines 1-15).

Beginning on page 6 of the appeal brief (hereinafter the brief), Appellant argues the following issues, which are accordingly addressed below.

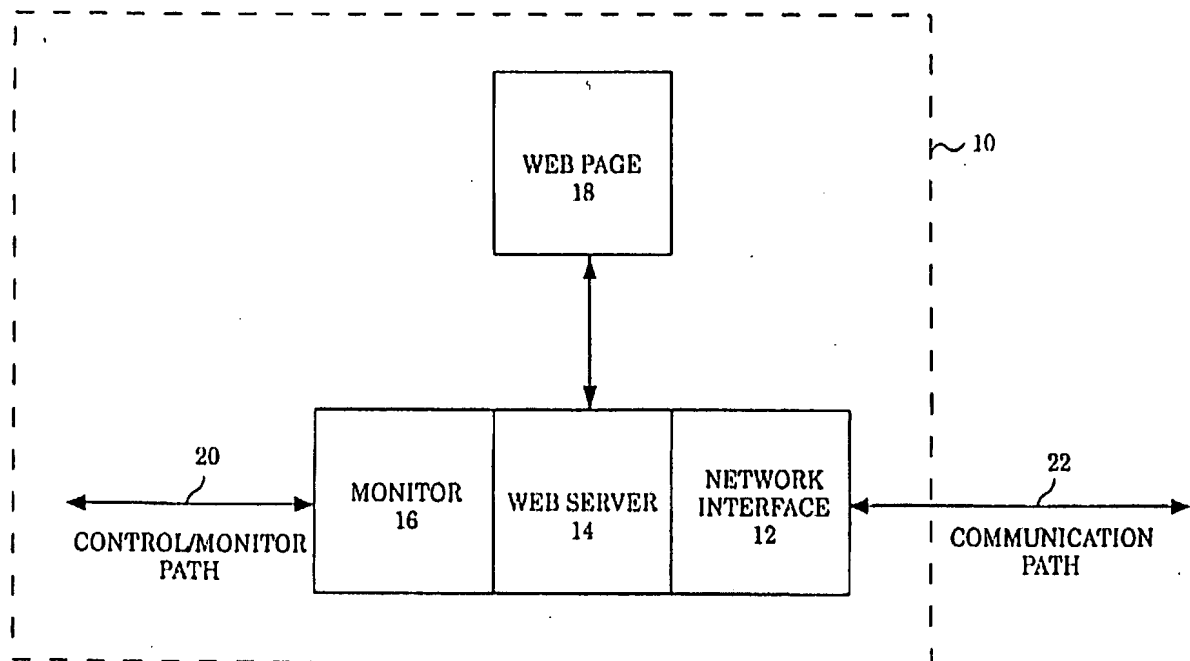
First: Appellant argues, the combination of **Aikens, Venkatraman and Webb** fail to teach receiving, from a first one of the plurality of target applications through an interface, by a monitoring device in the appliance or device, a request to send first information regarding monitored usage of the first one of the plurality of target applications to a first predetermined destination through a first communication protocol using a first data format as defined in independent claim 1 (see the brief page 7 through page 9).

The examiner respectfully disagrees.

As discuss in the rejection above, specifically Aiken discloses a printer device with operation monitoring (collection) capabilities (Aikens Abstract), whereby said printer comprises control boards (target applications) providing control for predetermined systems of said printer (Aikens Figure 2 items 102, 104, and 106). Since Aikens teaches that any one of the control boards can be the master control for the other boards, Aiken Figure 2 item 108 (with modem item 120), can be designated as the master controller, and therefore reasonably interpreted as a **first predetermined destination** of appellant's invention. In order for item 36 and 52 of Aikens (Aikens internal user interface - see Aikens Figure 2) to monitor accordingly, communication (i.e. a "first request" for "first" information) commences between said **interface**, the master control, and the various control board **applications** (one or more boards) utilizing communication channel 98, said information comprising monitoring (i.e. usage) information.

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In addition, in view of Venkatraman, discloses the embedding Web access in an appliance (i.e. a printer) for user interface functions (Venkatraman Abstract), an embedded monitor for monitoring accordingly (item 16), an embedded web server (item 14), and an embedded web page dynamically created to provide monitored information and user interface functions via communication path (item 22) (Venkatraman col. 3 lines 5-42, Fig. 1a). Also, Venkatraman discloses HTTP as a protocol, and HTML as a language (format) (Venkatraman col. 2 lines 42-48).

**Figure 1a**

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Using the broadest reasonable interpretation, the examiner reads the claimed **first communication protocol using a first data format** as equivalent to Venkatraman's Web access in an appliance (i.e. a printer) for user interface functions (Venkatraman Abstract). With reference to Venkatraman Figure 1a, Venkatraman discloses monitoring of a printer device via printer device (item 10), an embedded monitor for monitoring accordingly (item 16), an embedded web server (item 14), and an embedded web page dynamically created to provide monitored information and user interface functions (Venkatraman col. 3 lines 5-42). It is noted that all of the above items reside within printer device item 10. Venkatraman also discloses HTTP as a protocol, and HTML as a language (format) (Venkatraman col. 2 lines 42-48).

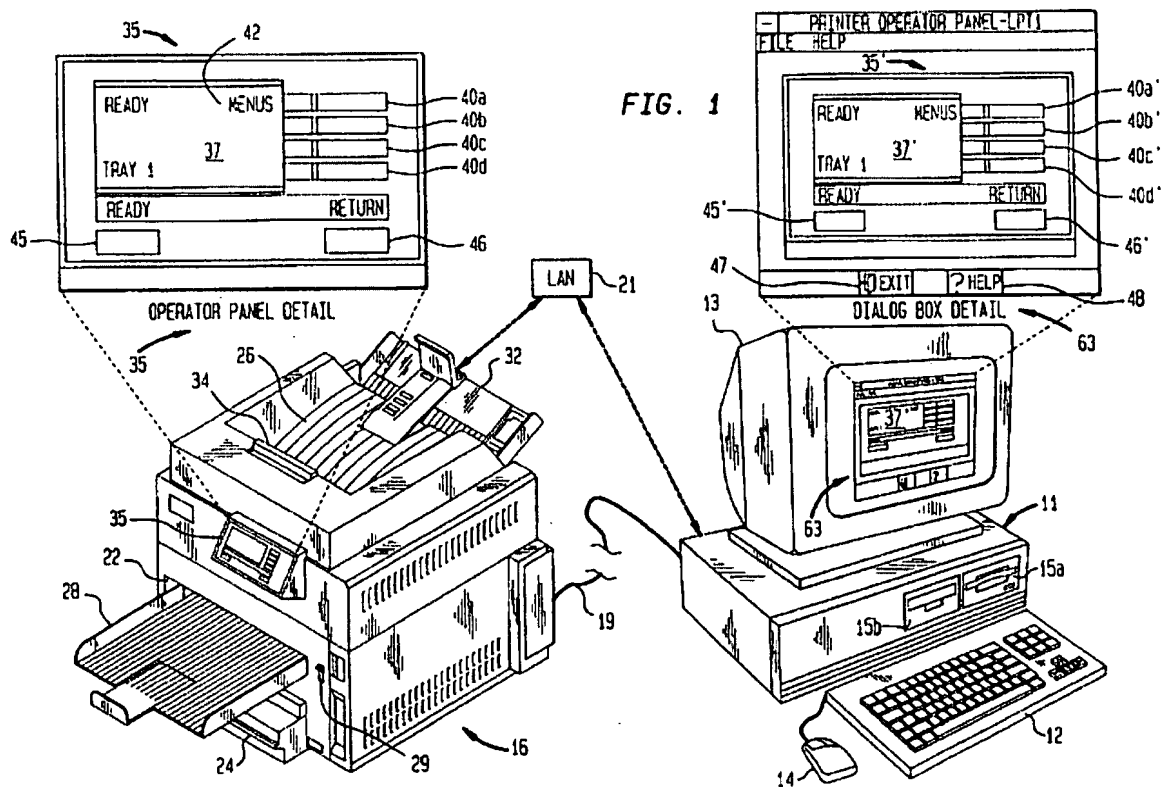
Second: Appellant argues, the combination of **Aikens, Venkatraman and Webb fail to teach the target application itself that initiates the request to send information regarding monitored usage of that target application as defined in independent claim 1** (see the brief page 7 middle of 1st paragraph and claims appendix page 13).

The examiner respectfully disagrees.

The appellant arguments, specifically the limitation of **itself** is not positively recited in the claim language; to clarify the Appellant's argument, specifically Aikens discloses an all in one (copier and printer) see fig. 2 of Aikens, and also taught by Webb in Fig. 1 an all in one (copier and printer). As discuss in the rejection above, specifically Aiken discloses a printer device with operation monitoring (collection) capabilities (Aikens Abstract), whereby said printer comprises control boards (target applications) providing control for predetermined

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systems of said printer (Aikens Figure 2 items 102, 104, and 106). Since Aikens teaches that any one of the control boards can be the master control for the other boards, Aiken Figure 2 item 108 (with modem item 120), can be designated as the master controller. In order for item 36 and 52 of Aikens (Aikens internal user interface - see Aikens Figure 2) to monitor accordingly, communication (i.e. a "first request" for "first" information) commences between said **interface**, the master control, and the various control board **applications** (one or more boards) utilizing communication channel 98, said information comprising monitoring (i.e. usage) information.



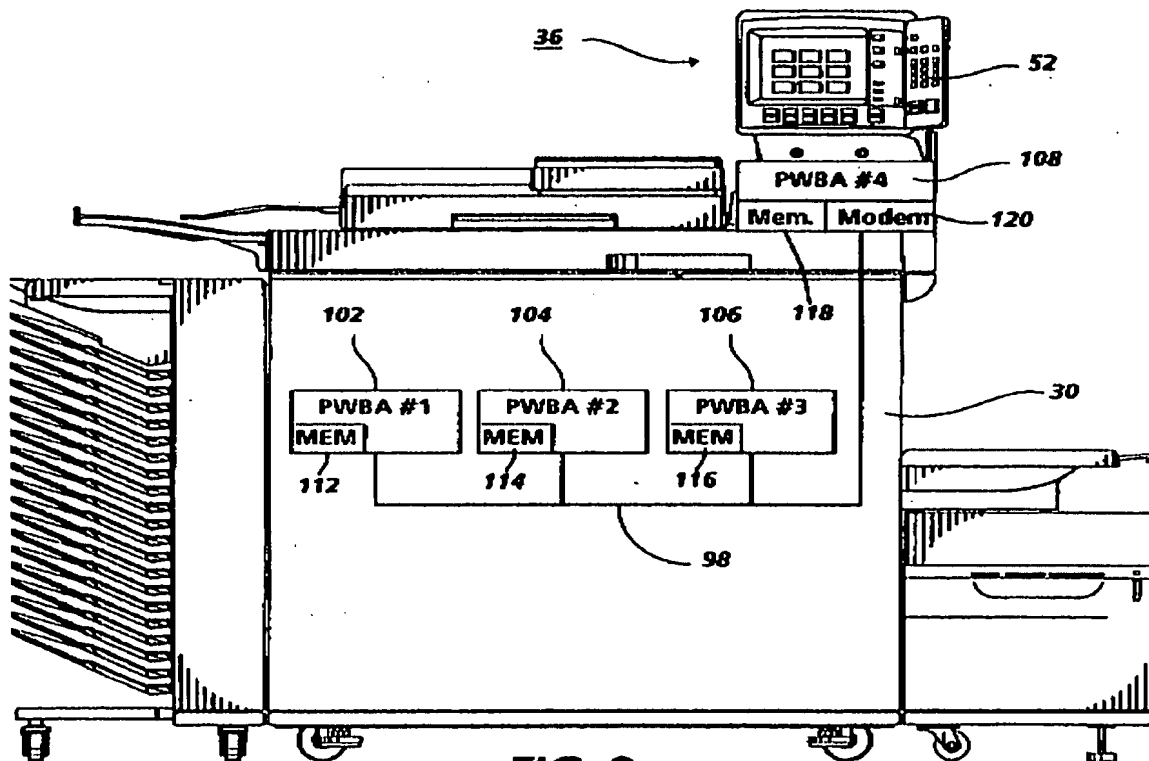


FIG. 2

Third: Appellant argues, the combination of Aikens, Venkatraman and Webb fail to teach a target application within the appliance or device sends a the request comes from the target application itself for the monitoring device to send the monitored usage information of the target application that sent the request as defined in independent claim 1 (see the brief page 8 middle of 1st paragraph and claims appendix page 13).

The examiner respectfully disagrees.

The appellant arguments are not positively recited in the claim language. Specifically the limitations of within the appliance or device and application itself; to clarify the Appellant's argument, specifically Aikens discloses an all in one (copier and printer) see fig. 2 of Aikens,

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and also taught by Webb in Fig. 1 an all in one (copier and printer). As discuss in the rejection above, specifically Aiken discloses a printer device with operation monitoring (collection) capabilities (Aikens Abstract), whereby said printer comprises control boards (target applications) providing control for predetermined systems of said printer (Aikens Figure 2 items 102, 104, and 106). Since Aikens teaches that any one of the control boards can be the master control for the other boards, Aiken Figure 2 item 108 (with modem item 120), can be designated as the master controller. In order for item 36 and 52 of Aikens (Aikens internal user interface - see Aikens Figure 2) to monitor accordingly, communication (i.e. a "first request" for "first" information) commences between said **interface**, the master control, and the various control board **applications** (one or more boards) utilizing communication channel 98, said information comprising monitoring (i.e. usage) information.

Fourth: Appellant argues, the combination of **Aikens, Venkatraman and Webb fail to teach a plurality of target applications and a monitoring device that are in an appliance or device, that a target application sends a request to a monitoring device for the monitoring device to send first information regarding monitored usage of the target application to a first predetermined destination, the request comes from the target application itself for the monitoring device to send the monitored usage information of the target application that sent the request as recites in claim1** (See the brief page 9 top of 1st paragraph and claims appendix page 13 1. (Rejected))

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The examiner respectfully disagrees.

The appellant arguments are not positively recited in the claim language. Specifically the limitation of **application itself**; to clarify the Appellant's argument, specifically Aikens discloses an all in one (copier and printer) see fig. 2 of Aikens, and also taught by Webb in Fig. 1 an all in one (copier and printer). As discuss in the rejection above, specifically Aiken discloses a printer device with operation monitoring (collection) capabilities (Aikens Abstract), whereby said printer comprises control boards (target applications) providing control for predetermined systems of said printer (Aikens Figure 2 items 102, 104, and 106). Since Aikens teaches that any one of the control boards can be the master control for the other boards, Aiken Figure 2 item 108 (with modem item 120), can be designated as the master controller. In order for item 36 and 52 of Aikens (Aikens internal user interface - see Aikens Figure 2) to monitor accordingly, communication (i.e. a "first request" for "first" information) commences between said **interface**, the master control, and the various control board **applications** (one or more boards) utilizing communication channel 98, said information comprising monitoring (i.e. usage) information.

To address the other claimed portion of the appellant's arguments, as discuss in the rejection above, specifically Aiken discloses a printer device with operation monitoring (collection) capabilities (Aikens Abstract), whereby said printer comprises control boards (target applications) providing control for predetermined systems of said printer (Aikens Figure 2 items 102, 104, and 106). Since Aikens teaches that any one of the control boards can be the master control for the other boards, Aiken Figure 2 item 108 (with modem item 120), can be designated as the master controller, and therefore reasonably interpreted as a **first predetermined destination** of appellant's invention. In order for item 36 and 52 of Aikens (Aikens internal user

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interface - see Aikens Figure 2) to monitor accordingly, communication (i.e. a "first request" for "first" information) commences between said **interface**, the master control, and the various control board **applications** (one or more boards) utilizing communication channel 98, said information comprising monitoring (i.e. usage) information.

In addition, in view of Venkatraman, discloses the embedding Web access in an appliance (i.e. a printer) for user interface functions (Venkatraman Abstract), an embedded monitor for monitoring accordingly (item 16), an embedded web server (item 14), and an embedded web page dynamically created to provide monitored information and user interface functions via communication path (item 22) (Venkatraman col. 3 lines 5-42, Fig. 1a). Also, Venkatraman discloses HTTP as a protocol, and HTML as a language (format) (Venkatraman col. 2 lines 42-48).

Using the broadest reasonable interpretation, the examiner reads the claimed **first communication protocol using a first data format** as equivalent to Venkatraman's Web access in an appliance (i.e. a printer) for user interface functions (Venkatraman Abstract). With reference to Venkatraman Figure 1a, Venkatraman discloses monitoring of a printer device via printer device (item 10), an embedded monitor for monitoring accordingly (item 16), an embedded web server (item 14), and an embedded web page dynamically created to provide monitored information and user interface functions (Venkatraman col. 3 lines 5-42). It is noted that all of the above items reside within printer device item 10. Venkatraman also discloses HTTP as a protocol, and HTML as a language (format) (Venkatraman col. 2 lines 42-48).

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Fifth: Appellant argues, the combination of Aikens, Venkatraman and Webb fail to teach receiving from a second one of the plurality of target applications through the interface, by the monitoring device, a request to send second information regarding monitored usage of the second one of the plurality of target applications to a second predetermined destination through a second communication protocol using a second data format, wherein the first communication protocol is different from the second communication protocol as recites in claim 1 (See the brief page 9 second half through page 10 top.)

The examiner respectfully disagrees.

As discuss in the rejection above, specifically Webb discloses the remote printer status information indication that is used for monitoring printer status (Webb Abstract). With reference to Figure 1, Webb discloses a computer (reasonably interpreted as a second destination) connected to a printer device via cable (item 19). Although Webb discloses said item as a parallel interface, Web also discloses this interface can be serial based as well (see Webb column 11 lines 1-5, column 10 lines 1-3). Webb discloses bi-directional communication of monitoring information via the Network Printer Alliance Protocol (NPAP), which is a protocol specific to printer communication. Webb also discloses that NPAP is a "format" (see Webb column 7 lines 40-53, and column 8 lines 20-25, Fig. 1). It is also noted that the NPAP protocol/format is different from the HTTP/HTML protocol/format.

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Sixth: Appellant argues, the combination of **Aikens, Venkatraman and Webb fail to establish prima facie case of obviousness** (see the brief page 10 second paragraph and page 11 top).

The examiner respectfully disagrees.

Following KSR direction as following: “SUPREME COURT OF THE UNITED STATES No. 04–1350 KSR INTERNATIONAL CO., PETITIONER v. TELEFLEX INC. ET AL. ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT [April 30, 2007], (page 2-3 of the court opinion) Following *Graham v. John Deere Co. of Kansas City*, 383 U. S. 1 (1966), the Court set out a framework for applying the statutory language of §103, language itself based on the logic of the earlier decision in *Hotchkiss v. Greenwood*, 11 How. 248 (1851), and its progeny. See 383 U. S., at 15–17. The analysis is objective:

“Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.” *Id.*, at 17–18.

While the sequence of these questions might be reordered in any particular case, the factors continue to define the inquiry that controls. If a court, or patent examiner, conducts this analysis and concludes the claimed subject matter was obvious, the claim is invalid under §103. Seeking to resolve the question of obviousness with more uniformity and consistency, the Court of Appeals for the Federal Circuit has employed an approach referred to by the parties as the “teaching, suggestion, or motivation” test (TSM test), under which a patent claim is only proved obvious if “some motivation or suggestion to combine the prior art teachings” can be found in the prior art, the nature of the problem, or the knowledge of a person having ordinary skill in the art. See, e.g., *Al-Site Corp. v. VSI Int’l, Inc.*, 174 F. 3d 1308, 1323–1324 (CA Fed. 1999). KSR challenges that test, or at least its application in this case. See 119 Fed. Appx. 282, 286–290 (CA Fed. 2005). Because the Court of Appeals addressed the question of obviousness in a manner contrary to §103 and our precedents, we granted certiorari, 547 U. S. ____ (2006). We now reverse.

Using the broadest reasonable interpretation, and cites evidences above, the Examiner had found that **Aikens** discloses a printer device with operation monitoring (collection) capabilities (**Aikens Abstract**), whereby said printer comprises control boards (target

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applications) providing control for predetermined systems of said printer (Aikens Fig. 2 items 102, 104, and 106), and therefore reasonably interpreted as a first predetermined destination of Applicant invention. In order for item 36 and 52 of Aikens (Aikens internal user interface - see Aikens Figure 2) to monitor accordingly, communication (i.e. a "first request" for "first" information) commences between said interface, the master control, and the various control board applications (one or more boards) utilizing communication channel 98, said information comprising monitoring (i.e. usage) information, in view of **Venkatraman** discloses the embedding Web access in an appliance (i.e. a printer) for user interface functions (Venkatraman Abstract), an embedded monitor for monitoring accordingly (item 16), an embedded web server (item 14), and an embedded web page dynamically created to provide monitored information and user interface functions via communication path (item 22) (Venkatraman col. 3 lines 5-42, Fig. 1a), It is noted that all of the above items reside within printer device item 10. Venkatraman also discloses HTTP as a protocol, and HTML as a language (format) (Venkatraman col. 2 lines 42-48) and further in view of **Webb** discloses the remote printer status information indication that is used for monitoring printer status (Webb Abstract). With reference to Figure 1, Webb discloses a computer (reasonably interpreted as a second destination) connected to a printer device via cable (item 19). Although Webb discloses said item as a parallel interface, Web also discloses this interface can be serial based as well (see Webb column 11 lines 1-5, column 10 lines 1-3). Webb discloses bi-directional communication of monitoring information via the Network Printer Alliance Protocol (NPAP), which is a protocol specific to printer communication. Webb also discloses that NPAP is a "format" (see Webb column 7 lines 40-53, and column 8 lines 20-25, Fig. 1). It is also noted that the NPAP protocol/format is different

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from the HTTP/HTML protocol/format. One of the ordinary skills in the art would have been motivated to modify this combination, because they are from the same field of endeavor of utilizing printer system and monitoring applications using different protocols, and providing the user interface of Aikens the benefit of Web page presentation (i.e. URLs, etc.) for a visually enhanced user interface, and for providing monitoring utilizing Aikens's modem interface connected to the Internet. It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Webb to Aikens (using Aikens's serial port - see Aikens column 6 line 7), also benefit of bi-directional control to Aikens's status (usage) monitoring, facilitating accurate visual monitoring.

Thus the examiner has established a prima facie obviousness rejection of claim 1.

Seventh: Appellant argues, that claim 1 of appellant's invention does not claim, **the Internet, bi-directional control, or visual monitoring as taught by the combination of Aikens, Venkatraman, and Webb** (the remarks, bottom-page 10).

The examiner respectfully disagrees.

Following KSR direction as following: "SUPREME COURT OF THE UNITED STATES No. 04-1350 KSR INTERNATIONAL CO., PETITIONER v. TELEFLEX INC. ET AL. ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT [April 30, 2007], (page 2-3 of the court opinion) Following *Graham v. John Deere Co. of Kansas City*, 383 U. S. 1 (1966), the Court set out a framework for applying the statutory language of §103, language itself based on the logic of the earlier decision in *Hotchkiss v. Greenwood*, 11 How. 248 (1851), and its progeny. See 383 U. S., at 15-17. The analysis is objective:

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“Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.” *Id.*, at 17–18.

While the sequence of these questions might be reordered in any particular case, the factors continue to define the inquiry that controls. If a court, or patent examiner, conducts this analysis and concludes the claimed subject matter was obvious, the claim is invalid under §103. Seeking to resolve the question of obviousness with more uniformity and consistency, the Court of Appeals for the Federal Circuit has employed an approach referred to by the parties as the “teaching, suggestion, or motivation” test (TSM test), under which a patent claim is only proved obvious if “some motivation or suggestion to combine the prior art teachings” can be found in the prior art, the nature of the problem, or the knowledge of a person having ordinary skill in the art. See, e.g., *Al-Site Corp. v. VSI Int’l, Inc.*, 174 F. 3d 1308, 1323–1324 (CA Fed. 1999). KSR challenges that test, or at least its application in this case. See 119 Fed. Appx. 282, 286–290 (CA Fed. 2005). Because the Court of Appeals addressed the question of obviousness in a manner contrary to §103 and our precedents, we granted certiorari, 547 U. S. ____ (2006). We now reverse.

Also, specifically the appellant’s disclosure page 3 para 18 (US 20020152235A1) discloses, “The present invention achieves these and other objects by monitoring the events of a target application of an application unit or by receiving the instruction to send the available stored information through a specified communication protocol. Examples of monitoring and of available stored information include (1) monitoring or logging data of a software program being executed on a computer or workstation under control of a user, (2) monitoring usage data of a control panel of an image forming apparatus (e.g., a copying machine, printer, facsimile, or scanner), or an appliance (e.g., a microwave oven, VCR, digital camera, cellular phone, or palm top computer), (3) monitoring or logging data regarding any internal state changes such as error conditions and warning conditions within appliances, devices and any systems and sending the results when requested or when events occur or when a preset time interval has passed, (4) externally monitoring states of appliances, devices or systems by polling at regular intervals, and (5) generally monitoring or logging any other device or service. The data obtained by monitoring

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events of a target application of an application unit, appliance, or device can, as a further feature in the present invention, be collected, logged and communicated to a desired location by a store-and-forward protocol (e.g., Internet e-mail) or a "direct" connection protocol, e.g., in which a socket connection is made to an ultimate destination machine (e.g., using FTP or HTTP). The use of store-and-forward communication reduces the costs associated with communicating such data. The data can be communicated to the desired location upon the occurrence of at least one of several events. Such events may include, e.g., each time a user exits a target application, or the completion of a predetermined number of times that a user has utilized and exited the target application of the application unit. If the configuration allows and if necessary, a direct connection between the monitored application and the monitoring system can be established in addition to the store-and-forward communication." Also see claim 2 page 13 of the brief "wherein the first data format includes one of text format, binary format, comma separated format and XML format and the first communication protocol includes one of, Simple Mail Transfer Protocol (SMTP), File Transfer Protocol and local disk."

One of the ordinary skills in the art would have been motivated to combine **Aikens, Venkatraman and Webb**, because they are from the same field of endeavor of monitoring applications using different protocols, and providing the user interface of Aikens the benefit of Web page presentation (i.e. URLs, etc.) for a visually enhanced user interface, and for providing monitoring utilizing Aikens's modem interface connected to the Internet. It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Webb to Aikens (using Aikens's serial port - see Aikens column 6 line 7), also benefit of bi-directional control to Aikens's status (usage) monitoring, facilitating accurate visual monitoring.

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Thus the examiner has established “some motivation or suggestion to combine the prior art teachings” can be found in the prior art, the nature of the problem, or the knowledge of a person having ordinary skill in the art. See, e.g., *Al-Site Corp. v. VSI Int’l, Inc.*, 174 F. 3d 1308, 1323–1324 (CA Fed. 1999). KSR challenges that test, or at least its application in this case. See 119 Fed. Appx. 282, 286–290 (CA Fed. 2005).

Eighth: Appellant argues, the combination of **Aikens, Venkatraman, Webb, and D’Souza fail to establish prima facie case of obviousness** (see the brief page 11 bottom).

The examiner respectfully disagrees.

Following KSR direction as following: “SUPREME COURT OF THE UNITED STATES No. 04–1350 KSR INTERNATIONAL CO., PETITIONER v. TELEFLEX INC. ET AL. ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT [April 30, 2007], (page 2-3 of the court opinion) Following *Graham v. John Deere Co. of Kansas City*, 383 U. S. 1 (1966), the Court set out a framework for applying the statutory language of §103, language itself based on the logic of the earlier decision in *Hotchkiss v. Greenwood*, 11 How. 248 (1851), and its progeny. See 383 U. S., at 15–17. The analysis is objective:

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test), under which a patent claim is only proved obvious if "some motivation or suggestion to combine the prior art teachings" can be found in the prior art, the nature of the problem, or the knowledge of a person having ordinary skill in the art. See, e.g., *Al-Site Corp. v. VSI Int'l, Inc.*, 174 F. 3d 1308, 1323–1324 (CA Fed. 1999). KSR challenges that test, or at least its application in this case. See 119 Fed. Appx. 282, 286–290 (CA Fed. 2005). Because the Court of Appeals addressed the question of obviousness in a manner contrary to §103 and our precedents, we granted certiorari, 547 U. S. ____ (2006). We now reverse.

Using the broadest reasonable interpretation, and cites evidences above, the Examiner had found that **Aikens** discloses a printer device with operation monitoring (collection) capabilities (Aikens Abstract), whereby said printer comprises control boards (target applications) providing control for predetermined systems of said printer (Aikens Fig. 2 items 102, 104, and 106), and therefore reasonably interpreted as a first predetermined destination of Applicant invention. In order for item 36 and 52 of Aikens (Aikens internal user interface - see Aikens Figure 2) to monitor accordingly, communication (i.e. a "first request" for "first" information) commences between said interface, the master control, and the various control board applications (one or more boards) utilizing communication channel 98, said information comprising monitoring (i.e. usage) information, in view of **Venkatraman** discloses the embedding Web access in an appliance (i.e. a printer) for user interface functions (Venkatraman Abstract), an embedded monitor for monitoring accordingly (item 16), an embedded web server (item 14), and an embedded web page dynamically created to provide monitored information and user interface functions via communication path (item 22) (Venkatraman col. 3 lines 5-42, Fig. 1a), It is noted that all of the above items reside within printer device item 10. Venkatraman also discloses HTTP as a protocol, and HTML as a language (format) (Venkatraman col. 2 lines 42-48) and further in view of **Webb** discloses the remote printer status information indication that is used for monitoring printer status (Webb Abstract). With reference to Figure 1, Webb discloses a computer (reasonably interpreted as a second destination) connected to a printer

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device via cable (item 19). Although Webb discloses said item as a parallel interface, Web also discloses this interface can be serial based as well (see Webb column 11 lines 1-5, column 10 lines 1-3). Webb discloses bi-directional communication of monitoring information via the Network Printer Alliance Protocol (NPAP), which is a protocol specific to printer communication. Webb also discloses that NPAP is a "format" (see Webb column 7 lines 40-53, and column 8 lines 20-25, Fig. 1). It is also noted that the NPAP protocol/format is different from the HTTP/HTML protocol/format, and further in view of **D'Souza**, discloses an object oriented frame work (D'Souza title), that provides Microsoft Corporation's COM specification defines binary standards for objects and their interfaces whereby a typical object is represented in the system by an instance data structure, a virtual function table, and member functions (D'Souza col. 15, lines 30-40). In addition, disclosing the client programs interact with the object by calling the member functions on a particular interface of the object. The object also exhibits polymorphism and inheritance in that the object which can provide interfaces in common with a base class and other similar objects, so that client programs can interact with each of the objects in the same manner by calling member functions of the interface that the objects have in common (D'Souza col. 16, lines 1-15). One of the ordinary skills in the art would have been motivated to modify this combination, because they are from the same field of endeavor of monitoring applications using different protocols, and providing the user interface of Aikens the benefit of Web page presentation (i.e. URLs, etc.) for a visually enhanced user interface, and for providing monitoring utilizing Aikens's modem interface connected to the Internet. It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Webb to

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Aikens (using Aikens's serial port - see Aikens column 6 line 7), also benefit of bi-directional control to Aikens's status (usage) monitoring, facilitating accurate visual monitoring.

Thus the examiner has established a prima facie obviousness rejection of claims 5-8, 13-16, and 21-24.

Therefore the Examiner respectfully maintains the rejection of claims 1-25 and should be sustained.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

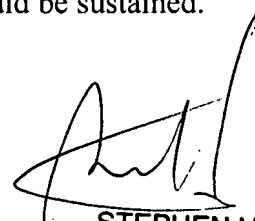
For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

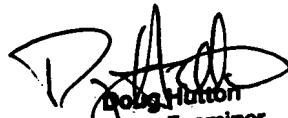
Quoc A. Tran


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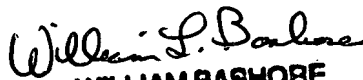
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